

# **Ethiopia Immunization Monitoring System**



![](_page_1_Picture_1.jpeg)

- Back ground of EPI and health system
- Ethiopian Health information system
- HPV denominator
- Challenge
- Planning and strengthen health information

![](_page_2_Picture_0.jpeg)

## **Ethiopia-Background**

![](_page_2_Figure_2.jpeg)

Source:- National Implementation Guideline for Expanded Program on Immunization-2021

# Health sector operating structures

![](_page_3_Picture_1.jpeg)

![](_page_3_Figure_2.jpeg)

### **Health Infrastructures**

![](_page_4_Picture_1.jpeg)

![](_page_4_Figure_2.jpeg)

Source: FMOH, HRIS/2018

![](_page_5_Figure_0.jpeg)

Currently 12 Antigens are being provided as part of the Routine Immunization program (RI).

#### **Ethiopia- Health Information System-Framework**

![](_page_6_Picture_1.jpeg)

PRINCIPLES	Integration		Simplification		Standardization		Participatory		Continuity
Domains	Inputs and processes				Output		Outcome	r	Impact
	Leadership and Governance	Health Financing Medical products and suppies	Service Delivery (Promotion, prevention, curative and rehabilitative service)		Availability of Essential Health Service		Coverage of Essential Health Services Health Security		Improved Health Status
		Health Workforce Community			Resilience in service provision		Financial Risk Protection	->	
		health Infrastructure Health Information			Demand for Health Services		Healthy Life Style Health System Responsiveness		Economic Gain
Data sources	Routine Information System: HMIS, CHIS, HRIS HCMIS, LIS, RIS, Vital Statistics, Insurance Information Systems and others Facility Assessments: SARA, SPA						Household and Facility Based Assessments, Population Based Surveys, BD Study, Researches, HMIS, Civil Registration and Others		
Analysis & synthesis	Data Quality Assurance; Triangulation of Data from different sources; Comparison of performance against benchmarks (Targets, baselines, standards and international and national commitments)								
Communication and use	Regular reporting, review by performance monitoring teams, regular review at JSC, ARM and other forums; midterm and final evaluation, Global reporting, share information products by different platforms								

### **Ethiopia- Health Information System-Progress**

![](_page_7_Picture_1.jpeg)

- Health information systems *policy documents* and guidelines developed and established
- Health information *system structures* at different levels established
- Various *platforms* put in place to strengthen key decision-making (performance monitoring teams (PMTs), review meetings, a Joint Steering Committee (JSC), and planning forums)
- DHIS2 platform was customized and fully scaled up with user-friendly data use features.
- Logistics information system, regulatory system, and other functions were also introduced

### **Ethiopia- Health Information System-Progress**

![](_page_8_Picture_1.jpeg)

- An electronic Community Health Information System (eCHIS) application was developed and implemented in 1250 in rural health posts
- Master Facility Registry, a web-based HRIS, and a National Health Data Dictionary (DD) implemented
- A national *database centre* was created at EPHI to handle the Public Health Emergency Management (*PHEM*) and others health data information system
- Vital events and civil registration systems are operational, but the coverage is low

# **Ethiopia Health Information System**

![](_page_9_Picture_1.jpeg)

#### Ethiopian HIS emphasizes on:

- Improving information use
- Improving data quality
- Decrease data burden
- Improving digitalization

#### Goal

**Comprehensive** and **standardized** national HMIS for evidence-based

planning and management of health services

HMIS for **decision-making at all levels** - community level, health facility, • woreda, regional and federal 10

### **Ethiopia Health Information System-Tools**

![](_page_10_Picture_1.jpeg)

![](_page_10_Picture_2.jpeg)

![](_page_10_Picture_3.jpeg)

- Registers
- Tally sheets
- Reporting formats
- DHIS2

![](_page_10_Picture_8.jpeg)

![](_page_10_Picture_9.jpeg)

# **Immunization Monitoring Tools**

![](_page_11_Picture_1.jpeg)

**Infant Immunization Register :-** A longitudinal register used to document all the required immunization data of a child

**EPI Immunization tally:-** Collects all infant vaccination and Td vaccine to women

**Monthly Service Delivery Reporting Form:-** Used to report all services including immunization coverage by antigen

**Immunization Monitoring Chart:-** Used to visually display coverage and drop out data over time show progress towards vaccinating the target population

**DHIS2:-** For monthly data entry, analysis and visualization

#### Human Papilloma Virus (HPV) Monitoring

![](_page_12_Picture_1.jpeg)

### Tools

- Iongitudinal HPV Vaccination register
- HPV vaccination tally sheet
- HPV vaccination card
- Campaign monitoring tools
- DHIS2

# **Immunization Reportable data elements**

![](_page_13_Picture_1.jpeg)

- BCG
- OPV 1 & 3
- IPV
- Pentavalent 1 & 3
- PCV 1 & 3
- Rota 1 & 2
- Measles 1 & 2
- HPV
- Fully Immunized
- PAB
- Vaccine Wastage Rate

![](_page_14_Picture_0.jpeg)

# **Immunization Indicators**

- Pentavalent third dose immunization coverage (< 1 year)</li>
- OPV 3 Immunization Coverage (< 1 year)
- PCV3 immunization coverage (< 1 year)
- Rota2 immunization coverage (< 1 year)
- IPV Immunization Coverage (< 1 year)
- MCV1 immunization coverage (< 1year)
- MCV2 immunization coverage (15-24 months)
- Full immunization coverage (< 1 year)
- Proportion of infants protected at birth against neonatal tetanus
- HPV 2 (Human Papilloma Virus vaccine (2nd dose) Immunization coverage (14 years old girls)
- Vaccine wastage rate

#### Human Papilloma Virus (HPV) Reportable data elements 🛜

![](_page_15_Picture_1.jpeg)

 Number of girls 14 year of age who have received first dose of human papilloma virus vaccine

 Number of girls 14 year of age who have received second dose of human papilloma virus vaccine in 6 months interval from the first dose

HPV doses given /opened/damaged/expired

#### **Ethiopia- Health Information System-Reporting Formats**

![](_page_16_Picture_1.jpeg)

#### By Type:

- Service delivery report forms
- Disease (Morbidity & Mortality) report form
- PHEM reports

# Reporting formats

#### By Health institution:

 Health post, Health center ,Hospital , clinics and WorHO/ZHD/RHB

#### By reporting Period:

- Immediate/ Weekly report
- Monthly /Quarterly/annual administrative report

#### **Ethiopia- Health Information System-Reporting Flow**

![](_page_17_Figure_1.jpeg)

#### **Ethiopia- Health Information System-Reporting Flow**

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![](_page_18_Picture_1.jpeg)

![](_page_18_Figure_2.jpeg)

Partnership (variable) channel – monthly / quarterly / annual (illustrative destinations – report destinations may be added or reduced)

![](_page_19_Picture_0.jpeg)

## **Denominator of HPV**

- Every year micro plan has been done for 14 years adolescent, we got data majorly from school
- Register from community where school enrollment is low
- We try to validate with CSA data
- Previous year performance data also considered
- Age trade off is also challenge

#### **Ethiopia- Health Information System-Challenges**

![](_page_20_Picture_1.jpeg)

- limited human resources for HIS
- Inadequate functionality of PMTs at all levels
- Poor documentation

![](_page_20_Picture_5.jpeg)

- Inadequate implementation of data quality assurance
- limited coverage of VPN-Health Net, LAN, electricity, and computers
- Limited functionality of an electronic medical record systems

![](_page_21_Picture_0.jpeg)

#### Planning and strengthen health information

- Triangulation
- Digitalization
- Validation exercise
- Strengthen PMT
- Improve data use culture at all level
- Capacity building
- Increasing the HIT professionals

# **Thank You!**